

number of feet of crab twigs as the first had of plum; also the crab twigs composed three and one half times as many pieces as all the other materials together. As to whether the birds break dead twigs from the trees or pick from the ground I cannot say; but if the former, it would have been possible for the birds to climb over the trees and without going to the ground to have obtained all the materials used in the first nest within twenty or thirty feet of the nest, and the bulk of the second nest the same. The two pieces of Osage Orange appeared to have been picked from the brushwood, and the Waahoo roots evidently came from the creek bank not more than fifty feet distant. At present I will not draw any conclusions; but the facts would indicate: That it was possible that the bulk of the material was picked from the trees and not from the ground; also the birds made use of the material which was most easily obtainable.

VIRGINIUS H. CHASE, *Wady Petra, Stark Co., Ill.*

THE LORAIN COUNTY, OHIO, WINTER BIRD FAUNA FOR 1898-9.

The work of determining with some degree of completeness what is our winter bird fauna for any given year as well as for a term of years, which was begun in December, 1897, has been continued during the season just closed. An account of that work may be of interest as a comparison with the 1897-8 results.

The severe storm of November 19-22, which swept from Montana sharply south-eastward across the central Mississippi Valley and upper lake region, thence north-eastward into Ontario, when it rapidly diminished, ushered in an early Winter, with snow as far south as Kentucky and freezing temperature nearly to the Gulf. Freezing temperatures continued in Ohio during the remainder of November and into December, with readings of 10°, 8° and 5° on the 8th, 10th and 14th of December, respectively. About the middle of December a marked warm wave overspread the country, which continued, with moderate fluctuations, until the close of the month, when another cold wave swept down from the north-west. During this warm period Bluebirds, Robins and Meadowlarks were many times reported.

The first few days of January were moderately warm, but the zero

mark was reached on the 11th. A reaction to 51° on the morning of the 14th was followed by moderate weather until the 27th, when zero temperature prevailed for a week. After a slight respite of three or four days, the severest weather of the season overspread the whole country, the temperature ranging from zero to 20° below for ten days, beginning February the 8th, at Oberlin. A marked warm wave during the third week of February was followed by moderate winter weather until the close of the month.

The snow-storm of the latter part of November was the only considerable snow until March, and that was gone by the middle of December. At no time, except early in December, was there snow enough on the ground to cause the birds any serious inconvenience.

Four excursions into the surrounding country were made in each of the three months. In December these were: on the 3d and 17th, half day walks into the woods and fields about Oberlin; and on the 22d and 27th, all day tramps across country to Lake Erie and home in the evening *via* the electric lines. These netted thirty-two species for December. An account of the work of the 22d may be found in BULLETIN No. 24, page 4, by Mr. W. L. Dawson. The other trips were made by the writer alone. In January the four trips—3d, 14th, 21st and 30th—were in company with Mr. Dawson, that of the 3d being a whole day tramp to Chance Creek and back. Only twenty-one species were recorded during this month, with but one species which was not seen in December. In February three half day and one all day tramps resulted in a record of twenty-six species. These were on the 4th, with Mr. Dawson; 11th, all day across country to Lake Erie, alone, with below zero temperature; 20th, half day, with Mr. Dawson; 25th, half day, alone. There were nine new records for the year 1899, this month, including Robin, Blue-bird, Meadowlark and Broad-winged Hawk, which were undoubted migrants on the 20th. It may not seem fair to reckon the February migrants in with the strictly winter birds; but it must be understood that these and others as well, would have been recorded in November after the winter actually began, if the record had begun then. It has been found that the calendar winter is a fair average both as to weather and birds.

In the following list of the birds observed during the past winter months, the letter C indicates that the species was common in some place at some time during the winter, and the letters T. C. that it was tolerably common. The others were uncommon, rare or casual.

Bob-white. T. C.	Blue Jay. C.
Red-tailed Hawk.	American Crow.
Red-shouldered Hawk.	Meadowlark.
Broad-winged Hawk.	American Goldfinch.
Am. Rough-legged Hawk.	Snowflake.
Golden Eagle.	Lapland Longspur.
Bald Eagle.	Tree Sparrow. C.
Pigeon Hawk.	Slate-colored Junco.
Am. Sparrow Hawk. T. C.	Song Sparrow. T. C.
Barn Owl.	Cardinal. T. C.
Lang-eared Owl.	Cedar Waxwing.
Short-eared Owl.	Northern Shrike.
Barred Owl.	Brown Creeper.
Screech Owl.	White-breasted Nuthatch. C.
Hairy Woodpecker. C.	Red-breasted Nuthatch.
Downy Woodpecker. C	Tufted Titmouse. C.
Red-headed Woodpecker. T. C.	Chickadee. C.
Red-bellied Woodpecker. T. C.	Golden-crowned Kinglet.
Flicker.	Robin.
Horned Lark. T. C.	Bluebird.
Prairie Horned Lark. T. C.	Total number of species 41.

During the past three winters Mr. Dawson and the writer have recorded fifty species; the record of forty-one species for the past winter being the largest. Each winter adds a few to the list, no doubt largely due to increasing activity on our part. Easier access to the lake shore would undoubtedly result in greatly extending the number of winter birds.

LYNDS JONES, *Oberlin, Ohio.*

A PRIMITIVE SWIFT COLONY.

While camped on the edge of beautiful Lake Drummond in the heart of the Dismal Swamp, June, 1897, we noticed a number of Chimney Swifts sailing about the lake. Looking for the chimney of our hotel, (two rough board shanties), we found it missing and the question, Where do they nest, naturally enough arose. The nearest habitation being some five miles distant and that, if our memory serves us right, possessed but a single chimney, which was in use and could not be let to the swifts for a household.